

#### IV. REMARKS

The Examiner objected to the disclosure for various informalities. The disclosure has been amended to overcome the objection.

In section 4 of the Action, the Examiner objected to the Specification, as best as the grounds of rejection can be understood, for failure to describe features recited in the claims (i.e. the claims recite a "device for manipulating substrates inside and outside an ultraclean workroom"). The Examiner is wrong and the objection should be withdrawn. The Examiner's attention is directed to the Specification (pp. 4, lines 22-26; pg. 5, lines 9-16; pg.6, lines 5-10; pg. 7, lines 16-21) and Figs. 1-3 (claims 1-2 are generic) which describe and show "a device 10". The device 10 has an ultraclean workroom 15 and a storage room 20 outside the ultraclean workroom. Further, the specification and drawings describe and show a manipulating device 31 for manipulating substrates inside the storage room (i.e. manipulating substrates outside the ultraclean workroom) and another manipulating device 51 for manipulating substrates inside the ultraclean workroom 15. Thus, the specification clearly describes and the drawings clearly show "a device for manipulating substrates inside and outside an ultraclean workroom" as called for in the claims. The Examiner is requested to withdraw the objection.

In section 5, the Examiner has objected to the drawings. Claim 1 has been amended to overcome the objection.

Claims 1-5, 8-14 and 16-18 have been rejected under 35 U.S.C. 112, First paragraph for failing the describe the features recited in the claims. The Examiner is incorrect, and this rejection should be withdrawn. The Examiner is asked to closely

read the Specification which clearly describes all the features recited in Claims 1-5, 8-14 and 16-18. The Examiner's attention is specifically directed to pg.8, lines 7-10 of the Specification stating that, "[t]he locking unit 18 has a rotating support 61, on which can be tightly seated the lower edge 62 of the hood 64 of each cassette box 13". One skilled in the art would clearly understand, in view of what is already know in the prior art that, the tight seat between the cassette hood and locking unit maintains the ultraclean room environment in the ultraclean workroom when the sluice door (formed by the bottom of the cassette box) is removed, so that the cassette 12 under ultraclean room condition can be accessed under ultraclean room conditions as called for in the claims. The specification meets the requirements under 35 U.S.C. 112, First paragraph, and the rejection should be withdrawn.

Claims 1-5, 8-14 and 16 have been rejected under 35 U.S.C. 112, second paragraph as being indefinite. The Applicant respectfully disagrees, and the examiner is requested to withdraw the rejection. The criteria for definiteness under 35 U.S.C. 112, Second paragraph, is not whether the claims conform to some unspecified structure (i.e. the Examiner refers to U.S. structure, whatever that may be), and it is not whether the claim has a particular structure that would be better understood by the Examiner. As noted before in Applicant's prior response, the arguments of which are incorporated by reference herein, the only test for definiteness under 35 U.S.C 112, for definiteness under 35 U.S.C. §112, second paragraph is whether a person skilled in the art would understand the claim language in light of the specification and drawings. Whether the claims are written in Jepson claim format or not is **irrelevant** to whether the claims are definite under 35 U.S.C. 112, Second paragraph. [Moreover it

has been noted before to the Examiner, that the pending claims are clearly not in Jepson format. Jepson format is established in 37 C.F.R. 1.75(e), and the instant claims are not in the format prescribed by 37 C.F.R. 1.75(e), and are not Jepson claims.] As also noted before, one skilled in the art would clearly understand the meaning and scope of the claims. This is especially so when reading the language in claims in view of the description and drawings in the instant application. In view of the decision in Festo, the Applicant will make no changes under a 35 U.S.C. §112, second paragraph rejection unless clearly necessary beyond a preponderance of evidence. This is not the case in the present 35 U.S.C. §112, second paragraph rejection. The examiner is requested to withdraw the rejection. With respect to the term "the boxes" in claim 1, this has been addressed previously, as well as the alternative language used in claim 1. [It is further noted that, in stating that the "and/or" language in claim 1 is drawn to undisclosed features, the Examiner is confusing requirements of 35 U.S.C. 112, First and Second paragraphs. Whether features recited in the claims are described in the Spec and shown in the drawings has to do with 35 U.S.C. 112, First not Second paragraph requirements. Nevertheless, the language at issue in claim 1 meets the criteria of both First and Second paragraph of 35 U.S.C. 112. One skilled in the art would clearly understand that the language "accommodated in row and/or column arrangement" means "accommodated in either, row and column arrangement, or row or column arrangement". This satisfies the test under 35 U.S.C. 112 Second paragraph. With respect to meeting requirements under 35 U.S.C. 112, First paragraph, the Examiner's attention is directed to page 2, line 4 of the specification, and Fig. 2, which describe and show the boxes in rows and columns. This arrangement clearly discloses the features recited by

"accommodated in rows and columns". However, the same arrangement also satisfies the language "accommodated in rows or in columns". Claim 1 does not call for any features that are not described in the specification and shown in the drawings.

With respect to Claim 2, similar to Claim 1, Claim 2 recites "Device, for manipulating substrates inside and outside an ultraclean room, with ... The language in Claim 2 as in Claim 1 is clear.

With respect to claim 3, the Examiner's attention is directed to the specification. Bottom 63 of the box 13 may also be the bottom of the cassette 12. (these are basic aspects of the art that one skilled in the art should understand).

Claim 5 is not redundant and is a proper dependent claim as it adds further features what has been previously claimed. Claim 3 recites that the sluice door is formed by a component of the box, and claim 5, which is dependent on claim 3, recites that the sluice door is formed by a platform of the cassette box. One skilled in the art would clearly understand the meaning and scope of claims 3 and 5.

Claims 1, 13, 14 and 16 have been rejected under 35 U.S.C. 102 as being anticipated by Iwai. The Applicant disagrees.

Claim 1 recites that the storage area (of the device) is extends over substantially the entire ultraclean workroom. Iwai does not anticipate the features recited in claim 1. In Figs. 11-12, Iwai discloses a process tube 101 that is accessed from a load lock chamber 108. The load lock chamber 108 and process tube 101 are separated by partition wall 154 from an input/output chamber 112. This partition area of the treatment apparatus in Iwai, holding

the process tube 101 and load lock chamber 108 and separated from the input/output chamber 112 by partition wall 154 is held under cleanroom conditions. The cleanroom partition in Iwai further includes a cassette extracting stage 117. As seen clearly in Fig. 11, the input/output chamber 112 (in which the cassette accommodating vessels 114 are stored) is extends over only the cassette extracting stage 117 of the cleanroom partition. Thus, at best, the input/output chamber 112, and in particular the storage stage 116 of the input/output chamber, can be considered to be extending over only a small part of the cleanroom partition from the whole or entire cleanroom, and not extending over substantially the entire cleanroom partition. Claim 1, on the other hand, recites that the storage area is extending over substantially the entire ultraclean workroom. Iwai fails to disclose the features recited in claim 1. Claims 1, 4, 6, 9-10, and 13-14 are patentable over the cited prior art and should be allowed.

Claims 2-5, 8-12, and 17-18 have been rejected under 35 U.S.C. 103 as being obvious over Iwai in view of Ohsawa. The Applicant disagrees.

Claim 2 calls for a sluice device, between the storage room and ultra clean room, with more than one locking unit through which the substrate can be transported, the locking units being independent of one another. Neither Iwai nor Ohsawa disclose or suggest the features recited in claim 2. As noted before, in Figs. 11-12 Iwai discloses that loadlock chamber 108 (providing access to process tube 101) is separated by a partition wall 154 from input/output chamber 112. The partition wall 154 has a single cassette extracting stage 117 providing a transit or gate for transitting through the partition wall, between loadlock 108


and input/output chamber 112. The cassette extracting stage 117 in Iwai however has but one cassette inlet hole 155 that serves as an opening portion to allow the cassette to be extracted and moved into the clean room partition. Thus, Iwai fails to disclose or suggest more than one locking units in the extracting stage through which cassettes can transit between load lock 108 and chamber 112. Ohsawa fails to overcome the defect in Iwai. In Figs. 1, and 3-4, Ohsawa discloses an apparatus with two heat treatment units 3A, 3B. The apparatus also has carrier accommodation racks 51, 52 in which carriers are staged. There are two wafer transfer mechanisms 34, one for each heat treatment unit 3A, 3B, and two wafer delivery sections 4A, 4B, one for each transfer mechanism. As seen in Fig. 3, each heat treatment unit 3A, 3B is served by a corresponding wafer transfer mechanism 34, which accesses the wafers from the carrier held in the corresponding wafer delivery section 4A, 4B. Nowhere does Ohsawa appear to disclose or suggest a sluice or gate of any kind between a storage room and an ultraclean workroom (Ohsawa does not disclose that the heat treatment units 3A, 3B are under ultraclean room conditions from the region of the apparatus with the accommodation racks 51, 52,) much less a sluice with more than one locking unit through which the substrates can be transported as called for in claim 2. Instead, Ohsawa merely discloses multiple carrier delivery sections 4A, 4B (which in no way are locking units of a sluice), one carrier delivery or holding section for each of the multiple transfer mechanisms 34 feeding the heat treatment units 3A, 3B. Thus Ohsawa also fails to disclose or suggest the features recited in claim 2. Further, Ohsawa suggests nothing about modifying Iwai to provide a sluice with multiple locking units in the partition wall separating the load lock from the input/output chamber 112. Ohsawa discloses one carrier holding section for each carrier. However, Iwai has

but one wafer transfer 152 (see Fig. 11) accessing wafers from the carrier, and hence according to the disclosure in Ohsawa there would be no need for another carrier holding section in Ohsawa. Moreover, as noted before, the carrier holding sections disclosed in Ohsawa are not locking units in a sluice device between a storage room and ultraclean workroom, and there would be nothing to suggest to one skilled in the art to modify the partition wall 154 in Iwai to provide multiple cassette inlet holes (i.e. a sluice device with multiple independent locking units). Neither Iwai nor Ohsawa disclose or suggest the features recited in claim 2. Claim 2 is patentable and should be allowed.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

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Respectfully submitted,

  
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